

10533787

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

LOGINID:sssptal604dxj

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 NOV 21 CAS patent coverage to include exemplified prophetic  
substances identified in English-, French-, German-,  
and Japanese-language basic patents from 2004-present  
NEWS 3 NOV 26 MARPAT enhanced with FSORT command  
NEWS 4 NOV 26 CHEMSAFE now available on STN Easy  
NEWS 5 NOV 26 Two new SET commands increase convenience of STN  
searching  
NEWS 6 DEC 01 ChemPort single article sales feature unavailable  
NEWS 7 DEC 12 GBFULL now offers single source for full-text  
coverage of complete UK patent families  
NEWS 8 DEC 17 Fifty-one pharmaceutical ingredients added to PS  
NEWS 9 JAN 06 The retention policy for unread STNmail messages  
will change in 2009 for STN-Columbus and STN-Tokyo  
NEWS 10 JAN 07 WPIDS, WPINDEX, and WPIX enhanced Japanese Patent  
Classification Data  
NEWS 11 FEB 02 Simultaneous left and right truncation (SLART) added  
for CERAB, COMPUAB, ELCOM, and SOLIDSTATE  
NEWS 12 FEB 02 GENBANK enhanced with SET PLURALS and SET SPELLING  
NEWS 13 FEB 06 Patent sequence location (PSL) data added to USGENE  
NEWS 14 FEB 10 COMPENDEX reloaded and enhanced  
NEWS 15 FEB 11 WTEXTILES reloaded and enhanced  
NEWS 16 FEB 19 New patent-examiner citations in 300,000 CA/CAPLUS  
patent records provide insights into related prior  
art  
NEWS 17 FEB 19 Increase the precision of your patent queries -- use  
terms from the IPC Thesaurus, Version 2009.01  
NEWS 18 FEB 23 Several formats for image display and print options  
discontinued in USPATFULL and USPAT2  
NEWS 19 FEB 23 MEDLINE now offers more precise author group fields  
and 2009 MeSH terms  
NEWS 20 FEB 23 TOXCENTER updates mirror those of MEDLINE - more  
precise author group fields and 2009 MeSH terms  
NEWS 21 FEB 23 Three million new patent records blast AEROSPACE into  
STN patent clusters  
NEWS 22 FEB 25 USGENE enhanced with patent family and legal status  
display data from INPADOCDB  
NEWS 23 MAR 06 INPADOCDB and INPAFAMDB enhanced with new display  
formats

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

Jagoe

10533787

NEWS LOGIN      Welcome Banner and News Items  
NEWS IPC8        For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:26:56 ON 09 MAR 2009

=> FIL REGISTRY		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 15:27:10 ON 09 MAR 2009  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2009 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES:    8 MAR 2009    HIGHEST RN 1117698-24-4  
DICTIONARY FILE UPDATES:   8 MAR 2009    HIGHEST RN 1117698-24-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2009.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> s strontium ranelate
      77648 STRONTIUM
        2 RANELATE
L1      1 STRONTIUM RANELATE
          (STRONTIUM(W)RANELATE)
```

```
=> s ranelate
L2      2 RANELATE
```

```
=> d 12 1-2
```

```
L2  ANSWER 1 OF 2  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   135459-87-9  REGISTRY
ED   Entered STN:  09 Aug 1991
```

Jagoe

10533787

CN 3-Thiopheneacetic acid, 5-[bis(carboxymethyl)amino]-2-carboxy-4-cyano-,  
strontium salt (1:2) (CA INDEX NAME)

OTHER NAMES:

CN Distrontium renelate

CN Protelos

CN Protos

CN S 12911

CN S 12911-2

CN **Strontium ranelate**

MF C12 H10 N2 O8 S . 2 Sr

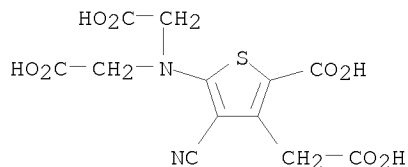
SR CA

LC STN Files: ADISINSIGHT, AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT,  
CHEMCATS, CIN, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSPRODUCT, IMSRESEARCH,  
IPA, MRCK\*, PATDPASPC, PHAR, PROMT, PROUSDDR, SYNTHLINE, TOXCENTER,  
USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: WHO

CRN (135459-90-4)



● 2 Sr

173 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

173 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L2 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2009 ACS on STN

RN 58194-26-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 3-Thiopheneacetic acid, 5-[bis(2-ethoxy-2-oxoethyl)amino]-4-cyano-2-(  
ethoxycarbonyl)-, ethyl ester (CA INDEX NAME)

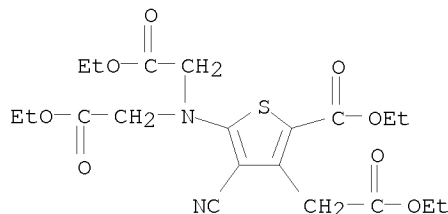
OTHER NAMES:

CN **Tetraethyl ranelate**

MF C20 H26 N2 O8 S

LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, CHEMCATS, TOXCENTER,  
USPATFULL

(\*File contains numerically searchable property data)



10533787

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

7 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file medicine

FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

21.11

21.33

FILE 'ADISCTI' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISINSIGHT' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'ADISNEWS' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Adis Data Information BV

FILE 'BIOSIS' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 The Thomson Corporation

FILE 'BIOTECHNO' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CAPLUS' ENTERED AT 15:28:07 ON 09 MAR 2009

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'DDFB' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DDFU' ACCESS NOT AUTHORIZED

FILE 'DGENE' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DISSABS' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'DRUGB' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'DRUGMONOG2' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'DRUGU' ENTERED AT 15:28:07 ON 09 MAR 2009

COPYRIGHT (C) 2009 THOMSON REUTERS

FILE 'EMBAL' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'EMBASE' ENTERED AT 15:28:07 ON 09 MAR 2009

Copyright (c) 2009 Elsevier B.V. All rights reserved.

FILE 'ESBIOBASE' ENTERED AT 15:28:07 ON 09 MAR 2009

Jagoe

10533787

COPYRIGHT (C) 2009 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'IFIPAT' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 IFI CLAIMS(R) Patent Services (IFI)

FILE 'IMSDRUGNEWS' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IMSPRODUCT' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 IMSWORLD Publications Ltd

FILE 'IPA' ENTERED AT 15:28:07 ON 09 MAR 2009  
Copyright (c) 2009 The Thomson Corporation

FILE 'KOSMET' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 International Federation of the Societies of Cosmetics Chemists

FILE 'LIFESCI' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 Cambridge Scientific Abstracts (CSA)

FILE 'MEDLINE' ENTERED AT 15:28:07 ON 09 MAR 2009

FILE 'NAPRALERT' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 Board of Trustees of the University of Illinois,  
University of Illinois at Chicago.

FILE 'NLDB' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 Gale Group. All rights reserved.

FILE 'NUTRACEUT' ENTERED AT 15:28:07 ON 09 MAR 2009  
Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PASCAL' ENTERED AT 15:28:07 ON 09 MAR 2009  
Any reproduction or dissemination in part or in full,  
by means of any process and on any support whatsoever  
is prohibited without the prior written agreement of INIST-CNRS.  
COPYRIGHT (C) 2009 INIST-CNRS. All rights reserved.

FILE 'PCTGEN' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 WIPO

FILE 'PHARMAML' ENTERED AT 15:28:07 ON 09 MAR 2009  
Copyright 2009 (c) MARKETLETTER Publications Ltd. All rights reserved.

FILE 'PHIN' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 Informa UK Ltd.

FILE 'SCISEARCH' ENTERED AT 15:28:07 ON 09 MAR 2009  
Copyright (c) 2009 The Thomson Corporation

FILE 'TOXCENTER' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USGENE' ENTERED AT 15:28:07 ON 09 MAR 2009  
COPYRIGHT (C) 2009 SEQUENCEBASE CORP

FILE 'USPATFULL' ENTERED AT 15:28:07 ON 09 MAR 2009  
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

10533787

FILE 'USPATOLD' ENTERED AT 15:28:07 ON 09 MAR 2009  
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 15:28:07 ON 09 MAR 2009  
CA INDEXING COPYRIGHT (C) 2009 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l2 or ranelate  
L3 2655 L2 OR RANELATE

=> s protelos or protos  
L4 1034 PROTELOS OR PROTOS

=> s l3 or l4  
L5 3305 L3 OR L4

=> s pain or ?itis  
LEFT TRUNCATION IGNORED FOR FILE 'ADISINSIGHT'  
LEFT TRUNCATION IGNORED FOR FILE 'ADISNEWS'  
5 FILES SEARCHED...  
LEFT TRUNCATION IGNORED FOR FILE 'DDFB'  
LEFT TRUNCATION IGNORED FOR FILE 'DGENE'  
LEFT TRUNCATION IGNORED FOR FILE 'DRUGB'  
LEFT TRUNCATION IGNORED FOR FILE 'DRUGMONOG2'  
LEFT TRUNCATION IGNORED FOR FILE 'DRUGU'  
15 FILES SEARCHED...  
LEFT TRUNCATION IGNORED FOR FILE 'IMSDRUGNEWS'  
LEFT TRUNCATION IGNORED FOR FILE 'IPA'  
LEFT TRUNCATION IGNORED FOR FILE 'LIFESCI'  
LEFT TRUNCATION IGNORED FOR FILE 'NLDB'  
LEFT TRUNCATION IGNORED FOR FILE 'NUTRACEUT'  
26 FILES SEARCHED...  
LEFT TRUNCATION IGNORED FOR FILE 'PCTGEN'  
LEFT TRUNCATION IGNORED FOR FILE 'PHARMAML'  
31 FILES SEARCHED...  
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'  
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'  
LEFT TRUNCATION IGNORED FOR FILE 'USPATFULL'  
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'  
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'  
LEFT TRUNCATION IGNORED FOR FILE 'USPATOLD'  
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'  
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'  
LEFT TRUNCATION IGNORED FOR FILE 'USPAT2'  
L6 8213771 PAIN OR ?ITIS  
Left truncation is not valid in the specified search field in the  
specified file. The term has been searched without left truncation.  
Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'  
would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you  
used a truncation symbol after a punctuation mark, the system may  
interpret the truncation symbol as being at the beginning of a term.  
Implied proximity is used in search fields indexed as single words,  
for example, the Basic Index.

=> s l5 and l6

L7 519 L5 AND L6

=> s l7 and pd<2003

Jagoe

10533787

5 FILES SEARCHED...  
'2003' NOT A VALID FIELD CODE  
'2003' NOT A VALID FIELD CODE  
'2003' NOT A VALID FIELD CODE  
15 FILES SEARCHED...  
'2003' NOT A VALID FIELD CODE  
22 FILES SEARCHED...  
'2003' NOT A VALID FIELD CODE  
28 FILES SEARCHED...  
'2003' NOT A VALID FIELD CODE  
31 FILES SEARCHED...  
L8 17 L7 AND PD<2003

=> dup rem  
ENTER L# LIST OR (END):18  
DUPLICATE IS NOT AVAILABLE IN 'ADISINSIGHT, ADISNEWS, DGENE, DRUGMONOG2,  
IMSPRODUCT, KOSMET, NUTRACEUT, PCTGEN, PHARMAML, USGENE'.  
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE  
PROCESSING COMPLETED FOR L8  
L9 13 DUP REM L8 (4 DUPLICATES REMOVED)

=> d 19 1-13 ibib, kwic

L9 ANSWER 1 OF 13 USPATFULL on STN  
ACCESSION NUMBER: 2002:343531 USPATFULL  
TITLE: Soluble lymphotoxin beta receptor and anti-lymphotoxin  
receptor and ligand antibodies as therapeutic agents  
for treatment  
INVENTOR(S): Browning, Jeffrey L., Brookline, MA, UNITED STATES  
Hochman, Paula S., Newton, MA, UNITED STATES  
Rennert, Paul D., Millis, MA, UNITED STATES  
MacKay, Fabienne, Vaucluse, AUSTRALIA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020197254	A1	20021226	<--
	US 7309492	B2	20071218	
APPLICATION INFO.:	US 2001-3211	A1	20011031	(10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-299139, filed on 23 Apr 1999, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1997-US19436	19971024
	US 1996-29060P	19961025 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Niki D. Cox, Esq., BIOGEN, INC., 14 Cambridge Center, Cambridge, MA, 02142	
NUMBER OF CLAIMS:	50	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	10 Drawing Page(s)	
LINE COUNT:	2115	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . which in turn activates mast cells to produce acute  
inflammatory reactions such as those which lead to eczema, asthma and  
rhinitis.  
SUMM . . . immune responses are associated with a number of organ-specific  
and systemic autoimmune conditions such as Systemic Lupus Erythematosus,

Jagoe

Wegener's Granulomatosis, Polyarteritis Nodosa (PAN), Rapidly Progressive Crescentic Glomerulonephritis and Idiopathic Thrombocytopenia Purpura, as well as chronic inflammatory diseases such as the Graves' and Chagas' disease. Humoral immune responses. . . .

DETD . . . caused by molecular mimicry. For example, the immune reaction to the Lyme disease infectious agent *Borrelia burgdorferi* leads to an arthritis-like disease presumably because some antigenic epitope on this bacterium resembles a normal joint component. Removal of the FDC-retained Lyme bacterium antigen may ameliorate Lyme disease induced arthritis. Such therapy would also be relevant to other cases of mimicry associated with infectious agents.

DETD . . . Miller et al., J. Exp. Med., 178, pp. 211-222 (1993)). Purified human IgG1 used as a control was purchased from Protos Immunoresearch (San Francisco, Calif.). MR1, anti-mouse CD40 ligand antibody, was purchased from Pharmingen (San Diego, Calif.).

DETD . . . include: Myasthenia Gravis, autoimmune hemolytic anemia, Chagas' disease, Grave's disease, idiopathic thrombocytopenia purpura (ITP) Systemic Lupus Erythematosus (SLE), Wegener's Granulomatosis, Poly-arteritis Nodosa and Rapidly Progressive Crescentic Glomerulonephritis. (From Benjamini, et al. Immunology, A Short Course, (Wiley-Liss, New York 3d ed. (1996)) Although the etiology of SLE is. . . in joint synovial spaces. These complexes activate the complement cascade and attract granulocytes. The subsequent inflammatory reaction is characterized as glomerulonephritis, with resulting damage to the kidneys leading to proteinuria and hematuria.

DETD [0174] Lupus nephritis has been studied in murine models for decades. Recently, the therapeutic efficacy of a reagent specific for the murine CD40. . . .

DETD . . . of activation, and damage from the release of lytic enzymes from their granules results in the destruction of cells. Rheumatic arthritis is thought to result from a type III hypersensitivity reaction mediated by immune complexes of antigen (in this case rheumatoid. . . .

DETD . . . reagent which inhibits antibody responses to ameliorate a pathologic immunological response is supported in the recent study of mouse lupus nephritis. In the latter study, administration of an antibody that blocks the CD40/CD40L pathway was shown inhibit the acceleration of lupus nephritis produced upon transfer of cells which induce the production of pathogenic antibodies in vivo, and have a sustained beneficial effect. . . .

L9 ANSWER 2 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:272935 USPATFULL  
 TITLE: Novel differentiation inducing process of embryonic stem cell to ectodermal cell and its use  
 INVENTOR(S): Sasai, Yoshiki, Kyoto, JAPAN  
 Nishikawa, Shin-Ichi, Kyoto, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020151056	A1	20021017	<--
APPLICATION INFO.:	US 2001-855587	A1	20010516	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2000-144059	20000516
	JP 2000-290819	20000925
	US 2000-257049P	20001220 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	



10533787

LEGAL REPRESENTATIVE: FITZPATRICK CELLA HARPER & SCINTO, 30 ROCKEFELLER  
PLAZA, NEW YORK, NY, 10112

NUMBER OF CLAIMS: 71

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 4056

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . so far been established in rat (P. M. Iannaccone et al., Dev.  
Biol., 163, 288 (1994)), in domestic fowl (B. Pain et al.,  
Development, 122, 2339 (1996); U.S. Pat. No. 5,340,740; U.S. Pat. No.  
5,656,479)), in pig (M. B. Wheeler, Reprod.. . .

DETD . . . serotonergic neuron marker serotonin (manufactured by Dia  
Sorin) or an antibody against a noradrenaline neuron marker dopamine  
 $\beta$ -hydroxylase (manufactured by PROTOS Biotech).

L9 ANSWER 3 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:243628 USPATFULL

TITLE: Novel purinse

INVENTOR(S): Metcalf, Chester A., III, Boston, MA, UNITED STATES  
Weigele, Manfred, Cambridge, MA, UNITED STATES  
Sawyer, Tomi K., Southborough, MA, UNITED STATES  
Bohacek, Regine, Boston, MA, UNITED STATES  
Shakespeare, William C., Framingham, MA, UNITED STATES  
Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES  
Wang, Yihan, Newton, MA, UNITED STATES  
Dalgarno, David C., Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020132819	A1	20020919	<--
APPLICATION INFO.:	US 2000-740653	A1	20001218	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-172510P	19991217 (60)
	US 1999-172161P	19991217 (60)
	US 2000-240788P	20001016 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Karoline Shair, Ph.D., Choate, Hall & Stewart, 53 State Street, Exchange Place, Boston, MA, 02109	
NUMBER OF CLAIMS:	195	
EXEMPLARY CLAIM:	1	
LINE COUNT:	4673	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . limited to, Paget's Disease, primary and secondary  
hyperparathyroidism, humoral hypercalcemia of malignancy, various  
cancers where resorption is increased, and rheumatoid arthritis

SUMM . . . fast increase in bone mineral content by promoting osteoblast  
activity. Such examples include peptides from the parathyroid hormone  
family, strontium ranelate, and growth hormone and  
insulin-like growth response (see, for example, Reginster et al.  
"Promising New Agents in Osteoporosis," Drugs R. . .

L9 ANSWER 4 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:192090 USPATFULL

TITLE: Novel heterocycles

Jagoe

10533787

INVENTOR(S): Weigele, Manfred, Cambridge, MA, UNITED STATES  
Luke, George P., Clinton, CT, UNITED STATES  
Sawyer, Tomi K., Southborough, MA, UNITED STATES  
Bohacek, Regine, Boston, MA, UNITED STATES  
Shakespeare, William C., Framingham, MA, UNITED STATES  
Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES  
Wang, Yihan, Newton, MA, UNITED STATES  
Dalgarno, David C., Brookline, MA, UNITED STATES  
Metcalf, Chester A., III, Boston, MA, UNITED STATES  
Vu, Chi B., Arlington, MA, UNITED STATES  
Kawahata, Noriyuki H., Medford, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020103161	A1	20020801	<--
APPLICATION INFO.:	US 2000-740267	A1	20001218	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-172510P	19991217 (60)
	US 1999-172161P	19991217 (60)
	US 2000-240788P	20001016 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Karoline K.M. Shair, Ph.D., Choate, Hall & Stewart, 53 State Street, Exchange Place, Boston, MA, 02109	
NUMBER OF CLAIMS:	111	
EXEMPLARY CLAIM:	1	
LINE COUNT:	4552	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . limited to, Paget's Disease, primary and secondary  
hyperparathyroidism, humoral hypercalcemia of malignancy, various  
cancers where resorption is increased, and rheumatoid arthritis

SUMM . . . fast increase in bone mineral content by promoting osteoblast  
activity. Such examples include peptides from the parathyroid hormone  
family, strontium anelate, and growth hormone and  
insulin-like growth response (see, for example, Reginster et al.  
"Promising New Agents in Osteoporosis," Drugs R. . .

SUMM . . . sterile isotonic aqueous buffer. Where necessary, the  
composition may also include a solubilizing agent and a local anesthetic  
to ease pain at the side of the injection. Generally, the  
ingredients are supplied either separately or mixed together in unit  
dosage form, . . .

L9 ANSWER 5 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:191593 USPATFULL  
TITLE: Human monoclonal antibody against a costimulatory  
signal transduction molecule AILIM and pharmaceutical  
use thereof  
INVENTOR(S): Tsuji, Takashi, Nagareyama-shi, JAPAN  
Tezuka, Katsunari, Yokohama-shi, JAPAN  
Hori, Nobuaki, Yokohama-shi, JAPAN

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020102658	A1	20020801	<--
	US 6803039	B2	20041012	
APPLICATION INFO.:	US 2001-859053	A1	20010516	(9)

Jagoe

	NUMBER	DATE
	-----	-----
PRIORITY INFORMATION:	JP 2000-147116	20000518
	JP 2001-99508	20010330
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	JANIS K. FRASER, PH.D., J.D., Fish & Richardson P.C., 225 Franklin Street, Boston, MA, 02110-2804	
NUMBER OF CLAIMS:	108	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	78 Drawing Page(s)	
LINE COUNT:	6932	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

SUMM . . . of pharmaceutical compositions according to this invention enables suppression, prevention and/or treatment of, for example, various disorders (for example, rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis, allergic contact-type dermatitis, chronic inflammatory dermatosis such as lichen planus, systemic lupus erythematosus, insulin-dependent diabetes mellitus, psoriasis, etc.) classified into autoimmune or allergic disorders (particularly autoimmune disease and delayed allergy caused by cellular immunity); arthropathia (for example, rheumatoid arthritis (RA) and osteoarthritis (OA)), inflammation (e.g., hepatitis); graft versus host reaction (GVH reaction); graft versus host disease (GVHD); immune rejection accompanying transplantation (homoplasty or heteroplasty) of a . . . of cytokines); and disorders possibly caused by the abnormal intestinal immunity (specifically inflammatory intestinal disorders (particularly clone disease and ulcerative colitis) and alimentary allergy).

SUMM [0030] The pharmaceutical composition of the present invention can be applied to inflammatory disease for example, inflammation accompanying various arthritis (for example, rheumatoid arthritis, osteoarthritis), pneumonia, hepatitis (including viral hepatitis), inflammation accompanying infectious diseases, inflammatory bowel diseases, intestinal enteritis, nephritis (inflammation accompanying glomerular nephritis, nephrofibrosis), gastritis, angiitis, pancreatitis, peritonitis, bronchitis, myocarditis, cerebritis, inflammation in postischemic reperfusion injury (myocardial ischemic reperfusion injury), inflammation attributed to immune rejection after transplantation of tissue and organ, burn, various skin inflammation (psoriasis, allergic contact-type dermatitis, lichen planus which is chronic inflammatory skin disease), inflammation in multiple organ failure, inflammation after operation of PTCA or PTCR, and inflammation accompanying arteriosclerosis, and autoimmune thyroiditis.

DETD . . . an active ingredient, it is possible to inhibit or treat and prevent, for example, a variety of diseases (e.g., rheumatoid arthritis, multiple sclerosis, autoimmune thyroiditis, allergic contact dermatitis, lichen planus as a chronic inflammatory skin disease, systemic lupus erythematosus, insulin dependent diabetes mellitus and psoriasis, etc.) classified into autoimmune diseases or allergic diseases (particularly, autoimmune diseases and delayed allergies by cellular immunity); arthropathies (e.g., rheumatoid arthritis (RA), osteoarthritis (OA)), inflammation (e.g., hepatitis); graft versus host reaction (GVH reaction); graft versus host disease (graft versus host

disease; GVHD); immunorejection associated with transplantation (allogenic. . . and diseases that are potentially caused by abnormality in gut immunity (specifically, inflammatory bowel disease (particularly, Crohn's disease and ulcerative colitis); and alimentary allergy, etc.

DETD . . . some inflammations for which various steroidal drugs are used as anti-inflammatory drugs, for example, inflammation associated with various arthritides (rheumatoid arthritis, osteoarthritis, etc.), pneumonia, hepatitis (including viral hepatitis), inflammation associated with infectious diseases, inflammatory bowel disease, enteritis, nephritis (glomerular nephritis, inflammation associated with kidney fibrosis, gastritis, vasculitis, pancreatitis, peritonitis, bronchitis, myocarditis, encephalitis, inflammation associated with ischemia-reperfusion injury (myocardial ischemia-reperfusion injury, etc.), inflammation associated with immunorejection after transplantation of tissues or organs, scald, various skin inflammations (psoriasis, allergic contact dermatitis, lichen planus as a chronic inflammatory skin disease), inflammation associated with multiple organ failure, inflammation after operation of PTCA or PTCR, and inflammation associated with atherosclerosis, autoimmune thyroiditis, etc.

DETD [1008] Biotin-labeled anti-human IgG antibody (Protos);

DETD [1041] Subsequently, peroxidase-conjugated goat anti-human IgG/ $\kappa$  antibody was added to each well (4,000 times diluted, 100  $\mu$ l/well, Protos), and the plate was incubated at room temperature for 1 hour.

L9 ANSWER 6 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2002:133863 USPATFULL

TITLE: Purine derivatives

INVENTOR(S): Weigele, Manfred, Cambridge, MA, UNITED STATES  
Sawyer, Tomi K., Southborough, MA, UNITED STATES  
Bohacek, Regine, Boston, MA, UNITED STATES  
Shakespeare, William C., Framingham, MA, UNITED STATES  
Sundaramoorthi, Rajeswari, Watertown, MA, UNITED STATES  
Wang, Yihan, Newton, MA, UNITED STATES  
Dalgarno, David C., Brookline, MA, UNITED STATES  
Metcalf, Chester A., III, Boston, MA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 20020068721	A1	20020606	<--
	US 7115589	B2	20061003	
APPLICATION INFO.:	US 2000-740393	A1	20001218	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-740267, filed on 18 Dec 2000, PENDING Continuation-in-part of Ser. No. US 2000-740653, filed on 18 Dec 2000, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-240788P	20001016 (60)
	US 1999-172161P	19991217 (60)
	US 1999-172510P	19991217 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	David L. Berstein, ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street, Cambridge, MA, 02139-4234	
NUMBER OF CLAIMS:	46	

10533787

EXEMPLARY CLAIM: 1  
LINE COUNT: 3811  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . limited to, Paget's Disease, primary and secondary hyperparathyroidism, humoral hypercalcemia of malignancy, various cancers where resorption is increased, and rheumatoid arthritis

SUMM . . . fast increase in bone mineral content by promoting osteoblast activity. Such examples include peptides from the parathyroid hormone family, strontium ranelate, and growth hormone and insulin-like growth response (see, for example, "Promising New Agents in Osteoporosis", Reginster et al. Drugs R. . .

L9 ANSWER 7 OF 13 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002177679 EMBASE

TITLE: Strontium ranelate: Dose-dependent effects in established postmenopausal vertebral osteoporosis - A 2-year randomized placebo controlled trial.

AUTHOR: Meunier, Pierre J., Dr. (correspondence); Slosman, D.O.; Delmas, P.D.; Sebert, J.L.; Brandi, M.L.; Albanese, C.; Lorenc, R.; Pors-Nielsen, S.; De Vernejoul, M.C.; Roces, A.; Reginster, J.Y.

CORPORATE SOURCE: Hopital Edouard Herriot, 69437 Lyon Cedex 03, France. Meunier@lyon151.inserm.fr

SOURCE: Journal of Clinical Endocrinology and Metabolism, (2002) Vol. 87, No. 5, pp. 2060-2066.  
Refs: 24

ISSN: 0021-972X CODEN: JCEMAZ

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 017 Public Health, Social Medicine and Epidemiology  
003 Endocrinology  
033 Orthopedic Surgery  
037 Drug Literature Index  
038 Adverse Reactions Titles

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 6 Jun 2002

Last Updated on STN: 6 Jun 2002

TI Strontium ranelate: Dose-dependent effects in established postmenopausal vertebral osteoporosis - A 2-year randomized placebo controlled trial.

SO Journal of Clinical Endocrinology and Metabolism, (2002) Vol. 87, No. 5, pp. 2060-2066.  
Refs: 24

ISSN: 0021-972X CODEN: JCEMAZ

AB The aim of the strontium ranelate (SR) for treatment of osteoporosis (STRATOS) trial was to investigate the efficacy and safety of different doses of SR, a. . .

CT Medical Descriptors:  
abdominal pain: SI, side effect  
adult  
aged  
alkaline phosphatase blood level  
arthralgia: SI, side effect  
article  
asthenia: SI, side effect  
backache: SI, side effect

bone density  
 bone metabolism  
 bone mineral  
bronchitis: SI, side effect  
 clinical trial  
 confidence interval  
 controlled study  
 coughing: SI, side effect  
 dose response  
 double blind procedure  
 drug efficacy  
 drug safety  
 drug tolerability  
 dual energy X ray absorptiometry  
 female  
 gastrointestinal symptom: SI, side effect  
 human  
 hypertension: SI, side effect  
 lumbar spine  
 major clinical study  
 multicenter study  
 myalgia: SI, side effect  
 neuralgia: SI, side effect  
 osteolysis  
 outcomes research  
pharyngitis: SI, side effect  
 \*postmenopause osteoporosis: DT, drug therapy  
 priority journal  
 randomized controlled trial  
rhinitis: SI, side effect  
 vertebra fracture  
 vertebra malformation  
 vertigo: SI, side effect  
 alkaline phosphatase: EC, endogenous compound  
 amino terminal telopeptide: EC, endogenous compound  
 peptide: EC, endogenous compound  
 \*strontium: AE, adverse drug reaction  
 \*strontium: CT, clinical trial  
 \*strontium: DO, drug dose  
 \*strontium: DT, drug therapy  
\*strontium ranelate: AE, adverse drug reaction  
\*strontium ranelate: CT, clinical trial  
\*strontium ranelate: DO, drug dose  
\*strontium ranelate: DT, drug therapy  
 unclassified drug  
 RN (alkaline phosphatase) 9001-78-9; (strontium ranelate)  
135459-87-9; (strontium) 7440-24-6

L9 ANSWER 8 OF 13 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002221691 EMBASE  
 TITLE: Treatment of postmenopausal osteoporosis.  
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)  
 CORPORATE SOURCE: Claude Bernard University of Lyon, France. delmas@lyon151.inserm.fr  
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)  
 CORPORATE SOURCE: INSERM Research Unit 403, Lyon, France. delmas@lyon151.inserm.fr  
 AUTHOR: Delmas, Pierre D., Dr. (correspondence)  
 CORPORATE SOURCE: Hopital e Herriot, Pavillon F, 69437 Lyon Cedex 03, France.

10533787

delmas@lyon151.inserm.fr  
AUTHOR: Delmas, Pierre D., Dr. (correspondence)  
CORPORATE SOURCE: Hopital E Herriot, Pavillon F, 69437 Lyon Cedex 03, France.  
delmas@lyon151.inserm.fr  
SOURCE: Lancet, (**8 Jun 2002**) Vol. 359, No. 9322, pp.  
2018-2026.  
Refs: 111  
ISSN: 0140-6736 CODEN: LANCAO  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 010 Obstetrics and Gynecology  
030 Clinical and Experimental Pharmacology  
033 Orthopedic Surgery  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ENTRY DATE: Entered STN: 11 Jul 2002  
Last Updated on STN: 11 Jul 2002  
SO Lancet, (**8 Jun 2002**) Vol. 359, No. 9322, pp. 2018-2026.  
Refs: 111  
ISSN: 0140-6736 CODEN: LANCAO  
CT Medical Descriptors:  
age  
article  
bone density  
bone mineral  
calcium intake  
clinical trial  
cognitive defect: SI, side effect  
diarrhea: SI, side effect  
diet  
drug efficacy  
drug induced disease: SI, side effect  
elderly care  
**esophagitis: SI, side effect**  
exercise  
falling  
flushing  
\*fracture: DT, drug therapy  
\*fracture: PC, prevention  
gastrointestinal disease: SI, side effect  
\*hip fracture: DT, drug therapy  
\*hip fracture: PC, prevention  
hormone substitution  
human  
morbidity  
nausea:. . .  
DO, drug dose  
risedronic acid: DT, drug therapy  
risedronic acid: PD, pharmacology  
selective estrogen receptor modulator: DT, drug therapy  
selective estrogen receptor modulator: PD, pharmacology  
**strontium ranelate: DV, drug development**  
tamoxifen: DT, drug therapy  
tamoxifen: PD, pharmacology  
thiazide diuretic agent  
tibolone: DT, drug therapy  
tibolone: PD, pharmacology  
tiludronic acid: DT, drug therapy

10533787

tiludronic. . .  
RN. . . acid) 40391-99-9, 57248-88-1; (parathyroid hormone) 12584-96-2,  
68893-82-3, 9002-64-6; (parathyroid hormone[1-34]) 12583-68-5, 52232-67-4;  
(raloxifene) 82640-04-8, 84449-90-1; (risedronic acid) 105462-24-6,  
122458-82-6; (strontium **ranelate**) **135459-87-9**;  
(tamoxifen) 10540-29-1; (tibolone) 5630-53-5; (tiludronic acid)  
96538-83-9; (vitamin K group) 12001-79-5; (zoledronic acid) 118072-93-8,  
131654-46-1, 165800-06-6, 165800-07-7

L9 ANSWER 9 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2001:22352 USPATFULL  
TITLE: Methods to improve neural outcome  
INVENTOR(S): Gluckman, Peter D., Auckland, New Zealand  
Williams, Christopher E., Auckland, New Zealand  
Guan, Jian, Auckland, New Zealand  
PATENT ASSIGNEE(S): Auckland Uniservices Limited, Auckland, New Zealand  
(non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6187906	B1	20010213	<--
APPLICATION INFO.:	US 1999-332868		19990615	(9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1997-907918, filed on 11 Aug 1997			

	NUMBER	DATE
PRIORITY INFORMATION:	NZ 1998-330684	19980615
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	Granted	
PRIMARY EXAMINER:	Low, Christopher S. F.	
LEGAL REPRESENTATIVE:	Nixon & Vanderhye	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	1057	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . insults associated with near-miss drowning, near-miss cot  
death, carbon monoxide inhalation, ammonia or other gaseous  
intoxication, cardiac arrest, collapse, coma, meningitis,  
hypoglycaemia and status epilepticus; episodes of cerebral asphyxia  
associated with coronary bypass surgery; cerebral anoxia or ischemia  
associated with stroke, . . .

DETD . . . O.sub.2 for 20 minutes, washed with 0.1M PBS (3+5  
minutes) and incubated with rabbit polyclonal antisera raised against  
tyrosine hydroxylase (Protos Biotech, USA) diluted 1:500 with  
1% goat serum for 48 hours at 4° C. The sections were washed in  
PBS. . .

L9 ANSWER 10 OF 13 SCISEARCH COPYRIGHT (c) 2009 The Thomson Corporation on  
STN

ACCESSION NUMBER: 2001:388795 SCISEARCH  
THE GENUINE ARTICLE: 429BP  
TITLE: Incorporation and distribution of strontium in bone  
AUTHOR: Dahl S G (Reprint)  
CORPORATE SOURCE: Univ Tromso, Fac Med, Dept Pharmacol, N-9037 Tromso,  
Norway (Reprint)  
AUTHOR: Allain P; Marie P J; Mauras Y; Boivin G; Ammann P;  
Tsouderos Y; Delmas P D; Christiansen C

Jagoe



CORPORATE SOURCE: CHU Angers, Lab Pharmacol & Toxicol, Angers, France; CNRS, Lariboisiere Hosp, INSERM, U349, Paris, France; Fac Med R Laennec, INSERM, U403, Lyon, France; Univ Geneva, Hop Cantonal, Div Malad Osseuses, Dept Med Interne, CH-1211 Geneva, Switzerland; Inst Rech Int Servier, F-92415 Courbevoie, France; Ctr Clin & Basic Res, Ballerup, Denmark

COUNTRY OF AUTHOR: Norway; France; Switzerland; Denmark

SOURCE: BONE, (**APR 2001**) Vol. 28, No. 4, pp. 446-453.  
ISSN: 8756-3282.

PUBLISHER: ELSEVIER SCIENCE INC, 655 AVENUE OF THE AMERICAS, NEW YORK, NY 10010 USA.

DOCUMENT TYPE: Article; Journal

LANGUAGE: English

REFERENCE COUNT: 77

ENTRY DATE: Entered STN: 25 May 2001  
Last Updated on STN: 25 May 2001  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

SO BONE, (**APR 2001**) Vol. 28, No. 4, pp. 446-453.  
ISSN: 8756-3282.

AB . . . into bone has been examined in rats, monkeys, and humans after oral administration of strontium (either strontium chloride or strontium **ranelate**), After repeated administration for a sufficient period of time (at least 4 weeks in rats), strontium incorporation into bone reaches. . .

STP KeyWords Plus (R): POSTMENOPAUSAL OSTEOPOROSIS; CALCIUM-METABOLISM; MINERAL DENSITY; ILIAC BONE; RATS; FLUORIDE; RESORPTION; **ARTHRITIS**; TURNOVER; SKELETON

L9 ANSWER 11 OF 13 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2001:550064 BIOSIS

DOCUMENT NUMBER: PREV200100550064

TITLE: Strontium **ranelate** increases cartilage matrix formation.

AUTHOR(S): Henrotin, Y. [Reprint author]; Labasse, A. [Reprint author]; Galais, Ph.; Tsouderos, Y.; Crielaard, J. M. [Reprint author]; Reginster, J. Y. [Reprint author]

CORPORATE SOURCE: Bone and Cartilage Metabolism Research Unit, University Hospital, CHU Sart-Tilman, 4000, Liege, Belgium

SOURCE: Clinical Rheumatology, (**2001**) Vol. 20, No. 5, pp. 416. print.  
Meeting Info.: 5th Belgian Congress on Rheumatology. Hasselt, Belgium. September 27-29, 2001.  
CODEN: CLRHD6. ISSN: 0770-3198.

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Nov 2001  
Last Updated on STN: 25 Feb 2002

TI Strontium **ranelate** increases cartilage matrix formation.

SO Clinical Rheumatology, (**2001**) Vol. 20, No. 5, pp. 416. print.  
Meeting Info.: 5th Belgian Congress on Rheumatology. Hasselt, Belgium. September 27-29, 2001.  
CODEN: . . .

IT . . .  
(Movement and Support)

IT Parts, Structures, & Systems of Organisms  
cartilage: skeletal system, matrix formation; chondrocytes: skeletal system

IT Diseases

osteoarthritis: joint diseaseOsteoarthritis (MeSH)

IT Chemicals &amp; Biochemicals

insulin-like growth factor-I; interleukin-1 beta; proteoglycans:  
production; stromelysin: activation; strontium ranelate:  
antiarthritic-drug

L9 ANSWER 12 OF 13 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on  
STN DUPLICATE 1

ACCESSION NUMBER: 2001:120190 BIOSIS

DOCUMENT NUMBER: PREV200100120190

TITLE: Strontium ranelate increases cartilage matrix formation.

AUTHOR(S): Henrotin, Y. [Reprint author]; Labasse, A.; Zheng, S. X.; Galais, Ph.; Tsouderos, Y.; Crielaard, J. M.; Reginster, J. Y.

CORPORATE SOURCE: Bone and Cartilage Metabolism Research Unit Institute of Pathology, C.H.U. Sart-Tilman, Bat B23, B-4000, Liege, Belgium

SOURCE: Journal of Bone and Mineral Research, (February, 2001) Vol. 16, No. 2, pp. 299-308. print.  
CODEN: JBMREJ. ISSN: 0884-0431.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 7 Mar 2001

Last Updated on STN: 15 Feb 2002

TI Strontium ranelate increases cartilage matrix formation.SO Journal of Bone and Mineral Research, (February, 2001) Vol. 16, No. 2, pp. 299-308. print.

CODEN: JBMREJ. ISSN: 0884-0431.

AB Based on previous studies showing that strontium ranelate (S12911) modulates bone loss in osteoporosis, it could be hypothesized that this drug also is effective on cartilage degradation in osteoarthritis (OA). This was investigated in vitro on normal and OA human chondrocytes treated or not treated with interleukin-1beta (IL-1beta). This . . . in OA cartilage. Chondrocytes were isolated from cartilage by enzymatic digestion and cultured for 24-72 h with 10<sup>-4</sup>-10<sup>-3</sup> M strontium ranelate, 10<sup>-3</sup> M calcium ranelate, or 2.10<sup>-3</sup> M SrCl<sub>2</sub> with or without IL-1beta or insulin-like growth factor I (IGF-I). Stromelysin activity and stromelysin quantitation were . . . were quantified by labeled sulfate (Na<sup>235</sup>SO<sub>4</sub>) incorporation. This method allowed the PG size after exclusion chromatography to be determined. Strontium ranelate, calcium ranelate, and SrCl<sub>2</sub> did not modify stromelysin synthesis even in the presence of IL-1beta. Calcium ranelate induced stromelysin activation whereas strontium compounds were ineffective. Strontium ranelate and SrCl<sub>2</sub> both strongly stimulated PG production suggesting an ionic effect of strontium independent of the organic moiety. Moreover, 10<sup>-3</sup> M strontium ranelate increased the stimulatory effect of IGF-I (10<sup>-9</sup> M) on PG synthesis but did not reverse the inhibitory effect of IL-1beta. Strontium ranelate strongly stimulates human cartilage matrix formation in vitro by a direct ionic effect without stimulating the chondroresorption processes. This finding provides a preclinical basis for in vivo testing of strontium ranelate in OA.

IT . . .

System (Movement and Support); Pharmacology

IT Parts, Structures, &amp; Systems of Organisms

cartilage: skeletal system; chondrocytes: skeletal system

IT Diseases

10533787

osteoarthritis: joint disease  
Osteoarthritis (MeSH)  
IT Diseases  
    osteoporosis: bone disease  
    Osteoporosis (MeSH)  
IT Chemicals & Biochemicals  
    interleukin-1-beta; strontium ranelate [S12911]  
RN 135459-87-9 (S12911)  
  
L9 ANSWER 13 OF 13 IMSPRODUCT COPYRIGHT 2009 IMSWORLD on STN  
  
SO Drug Launches, (20 Sep 1999)  
CN Trade Name: PROTOS  
CN Chemical Name: protoporphyrin IX disodium  
TX Hepatic disorders caused cholecystitis or gall stones